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APPLICANT: NIPPON TELEGR & TELEPH CORP

<NTT>;

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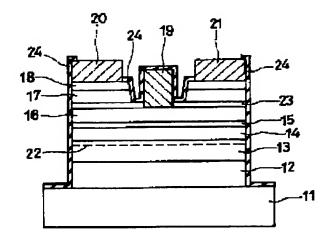
INT.CL.

H01L 21/338 H01L 29/812

TITLE

HIGH ELECTRON MOBILITY

TRANSISTOR



ABSTRACT:

PURPOSE: To provide a high electron mobility transistor with well-controlled threshold voltage, which is well reproducible.

CONSTITUTION: First to. eighth semiconductor layers 12 to 16, 23, 17 and 18 are sequentially deposited. The semiconductor layers 18, 17 and 23 are selectively removed until the fifth semiconductor layer 16 is exposed, so that a recess structure is defined by the semiconductor layers 18, 17, 23 and 16. In the recess, a first electrode 19 is formed on the semiconductor layer 16. Outside the recess, second and third electrodes 20 and 21 are on the semiconductor layer 18 on opposite sides of the first electrode 19. All the surfaces of semiconductor layers 18, 17 and 23, except the electrodes, are covered with a protective film 24.

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